SUBCOMMITTEE ON CONSEQUENCE ASSESSMENT AND PROTECTIVE ACTIONS (SCAPA)

Memorandum 04-01

To: SCAPA Membership

From: Al Feldt, NA-41

Date: January 30, 2004

Subject: SCAPA CAM WORKING GROUP CHARTER

Attached is the final charter that has been developed for the SCAPA Consequence Assessment Modeling (CAM) Working Group.

Al Feldt, NA-41 SCAPA Director

Attachment

Distribution: SCAPA membership

SCAPA Consequence Assessment Modeling Working Group

Charter

Consequence assessment modeling is an important activity that is conducted by the Department of Energy (DOE) and the National Nuclear Security Administration (NNSA) and its contractors in support of its national security, emergency response, environmental protection, and integrated safety management operational programs; as well as its scientific research and development programs. The DOE Subcommittee on Consequence Assessment and Protective Actions (SCAPA) provides DOE and NNSA with technical recommendations on emergency preparedness and response to safeguard the health and safety of public and workers at DOE and NNSA facilities. These recommendations focus on characterizing potential radiological, chemical, and biological source terms; the environmental transport and dispersion and deposition of these contaminants; the resulting health and environmental impacts associated with exposure to these contaminants; and the protective actions necessary to mitigate such impacts.

The Consequence Assessment Modeling (CAM) Working Group of SCAPA has been established to provide technical guidance to the DOE and NNSA community on matters related to environmental transport and dispersion, deposition, resuspension, uptake, and other technical aspects associated with consequence assessment modeling. The need for this technical guidance is linked to the following programmatic considerations:

- 1) Changes in the type and quantity of radiological and hazardous chemicals that are processed, stored, transported, and disposed of at DOE and NNSA sites;
- 2) Changes in the DOE and NNSA mission and its directives, guides, handbooks, and standards;
- 3) Advances in physical, chemical, and human health impact characteristics of radiological, chemical, and biological materials;
- 4) Advances in environmental and human health modeling techniques;
- 5) Advances in information technology, display capabilities, and information communication;
- 6) Emergence and continued development of new assessment resources (e.g., NARAC); and;
- 7) Need for the upgrade of safeguards that protect national homeland security.

The CAM core group should consist of representatives from each major DOE and NNSA site, as well as from stakeholder DOE HQ elements. The CAM should work in close conjunction with other SCAPA working groups (e.g., Hazards Assessment Subcommittee) and associated related organizations (e.g., DOE Meteorological Coordinating Council [DMCC]).

The objectives of the CAM Working Group are as follows:

- 1) Promote the use of improved, quality assured, and benchmarked consequence assessment modeling techniques within the DOE complex;
- 2) Improve coordination between DOE and NNSA sites and programs to promote, where appropriate, common methods, tools, and standards for consequence assessment modeling;
- 3) Plan for future DOE and NNSA needs, requirements, and missions;
- 4) Promote innovation and technology transfer in consequence assessment modeling; and,
- 5) Advocate awareness of appropriate consequence assessment modeling capabilities and the benefits to DOE and NNSA and its contractors of adopting such methods.

The CAM Working Group will accomplish its objectives by:

- 1) Providing information and leadership within DOE and NNSA in all aspects of consequence assessment modeling;
- 2) Encouraging the exchange of technical information between DOE and NNSA sites;
- 3) Identifying and advocating areas requiring further research and development;
- 4) Encouraging the development and dissemination of new consequence modeling tools within a toolbox framework;
- 5) Interfacing with other Federal and State agencies, the DMCC, academic groups, and professional organizations working in the area of consequence assessment modeling;
- 6) Making recommendations on the applicability of new modeling approaches towards the solution of DOE and NNSA issues; and,
- 7) Providing technical support to members of the DOE and NNSA community who request assistance.